

APPARATUS AND METHOD FOR DISTRIBUTING CONTROL PLANE  
FUNCTIONS IN A MULTIPROCESSOR ROUTER

ABSTRACT OF THE DISCLOSURE

A router for interconnecting external devices. The router comprises a switch fabric and a plurality of routing nodes coupled to the switch fabric. Each routing node comprises packet processing circuitry for transmitting data packets to, and receiving data packets from, the external devices and for transmitting data packets to, and receiving data packets from, other routing nodes via the switch fabric and control data processing circuitry capable of performing control and management functions. The control data processing circuitry comprises a first network processor for performing control and management functions associated with the router and a second network processor for performing control and management functions associated with the router. The control and management functions are dynamically allocated between the first network processor and the second network processor.